CHAPTER I

INTRODUCTION

The background concerns the role of technology in the world, especially in the education field. The research questions deal with how thinking skills are represented in *My English Step*.com. The purpose of the study is concerned with how HOTS is represented on the *My English Step* Website.

1.1 Background of Study

Today in the era of globalization which is often regarded as the era of technology, technology performs an essential position in our life. The role of technology has changed the world that we started now. Technology impacts the way people communicate, learn, and think. It facilitates society and determines how humans question with. The role of technology in the world of education is growing rapidly because it is very necessary. The development of technology requires learners to equip themselves with vital knowledge and insight within the era of world competition.

As stated by Andrini (2016) the need for the 21st century in the curriculum of educational institutions is oriented to create productive, creative, innovative, and effective generations through the integration of attitudes, abilities, and knowledge with life skills. A thinking skill is any cognitive process broken down into a set of explicit steps which are then used to guide thinking (Johnson, 2000). For example, inferring is a cognitive process that is one of the Essential Skills for Social Studies

as defined by the NCSS (1994). To infer one must integrate observed clues with background knowledge to make an informed guess or prediction. This cognitive process can be made into a thinking skill by breaking it into the following steps: (a) identify the question or point of inference, (b) identify what is known or observed, (c) identify relevant and related knowledge, and (d) make a reasoned guess based on b and c.

Since the Indonesian curriculum has been modified to be the curriculum 2013, the government through the educational quality insurance institution (Lembaga Penjaminan Mutu Pendidikan or LPMP) requires the teacher to help students to emphasize their thinking. The application of Curriculum 2013 requires that the mindset and the thinking ability of teachers and students should change from lower-order thinking skills (LOTS) to higher-order thinking skills (HOTS). HOTS has become the new concept in education reform which is used in Indonesia recently based on the top three levels of Bloom's taxonomy of cognitive domain, which include analyzing, evaluating, and creating (Kaur&Ghanapati, 2014). It is the ability and expertise to find the answer or achieve targeted goals through various forms of thinking processes (Budsankom, 2015). The government expects the students could be greater essential and analytical in their thinking so that it will solve the issues they face in their daily lives. Curriculum 2013 which is now implemented in Indonesia motivates many changes in schooling, certainly, one of that is student talents from lower-order thinking skills (LOTS) to higher-order thinking skills (HOTS). This route calls for adjustments inside the learning process method if you want to recognize the desires of the 2013 curriculum. Curriculum

2013 fosters learners to have qualified human resources to compete in this global era.

The present study focuses on the representation of thinking skills based on Bloom's Revised Taxonomy in e-learning. Some relevant studies analyze thinking skills based on Bloom's revised taxonomy in textbooks, for example, a study conducted by Syaryfah Nur Fadhillah (2019) entitled "An Analysis of Bloom"s Taxonomy Found in the Textbook Exercise on "BahasaInggris" Textbook for Twelfth Grade Published by *Pusat Kurikulum dan Perbukuan*". The result showed that the distribution of higher-order thinking skills (HOTS) is lower than lower-order thinking skills (LOTS). This is in line with Anasy (2016) who analyzed the distribution of HOTS based on Bloom's revised taxonomy in an essay question in a textbook. The results were almost similar, the distribution of HOTS is lower than the LOTS.

From the previous study conducted by Syaryfah Nur Fadhillah (2019) entitled "An Analysis of Bloom"s Taxonomy Found in the Textbook Exercise on "BahasaInggris", the author assumed that the incorporation of higher-order thinking in many textbooks is not evenly allotted. This problem is also stated by Kusuma, et al (2017) that the issues in school are the questions used in the evaluation of cognitive devices tend to test extra aspects on the memory element, meanwhile, the questions that train college students' higher-order thinking skills are not available. For that reason, the writer is curious about the incorporation of bloom's revised taxonomy in different media, in this example e-learning platforms, since research that analyzed higher-order thinking skills in this area has not been completed much.

The recent reform of our education system has witnessed, among others, the incorporation of higher-order thinking skills into the curriculum at the least bit educational levels (Jerome, et. al, 2017), but the implementation of this curriculum has been unsatisfactory thanks to the new and unfamiliar format that challenges students' conventional way of thinking and learning (Othman, 2014). Practicing tasks on questions that contain HOTS, can improve the critical thinking skills of students, but this is still questionable. In line with Anasy (2016), he claims that many tasks involving the higher-order thinking ability in the curriculum may still be problematic in practicing the higher-order thinking skill.

Moreover, besides the mastery of thinking skills, students are now also required to have digital literacy. Several developments and new inventions in the educational field have emerged along with the advancement of the internet and technology. The intended outcome of this increased IT-facilitated student engagement is to foster and support other important 21st-century skills such as HOTSin both academia and workplace environments (Saadé, 2012)

Today there are so many learning applications available. With several types and options, from paid to free from the general subject to specific subject. One website learning that is specifically made for junior high school students and can be accessed easily is *My English Step* (www.myenglishstep.com). This website learning has been used by several schools, students, and teachers to support learning that is currently running massively. Moreover, because it can be accessed easily, students can learn efficiently. *My English Step* has facilities for every level in junior high school from 7-to 9 graders, from each class some activities have been adjusted to the learning objectives according to the syllabus. In Indonesia, the availability of

digital learning materials is supported by the Ministry of Education, Culture, Research and Technology of Indonesia, i.e. by providing various online learning programs, such as the Channel's website, live-streaming of *Rumah Belajar* (Learning Home), and *TV Edukasi*, an educational television station (MoECRT, 2020) for students and teachers. Besides, MoECRT has coordinated ten technology providers such as *Ruangguru, Zenius, Microsoft Teams, and Quipper School*, to provide free access to online learning. However, for English language learning in Junior High School, the availability of digital materials in line with the Curriculum 2013 is still scarce. This learning platform combines various learning media, from video to infographic summaries, quizzes, and practice sets. However, this study aims to focus on how higher-order thinking skills are incorporated in instruction and questions for seventh grade in the practice based on Bloom's revised taxonomy.

This present study mainly discusses higher-order thinking skills in e-learning applications, particularly *My English Step, which* focuses on analyzing the whole exercise in My *English Step,* particularly in the exercise for seventh graders which only focuses on the instruction and question. Specifically, 129 instructions and 101 questions from eight units of the seventh grade, namely Good Morning, My Name is Bella, My Birthday is in May, The TV is in Living Room, My Brother is Tall, I Wake Up at 5 am, Cute Cuddly Cats, Let's Sing.

Subsequently, according to law no. 20 the year 2003 the aim of education is knowledge, skills, and scientific progress that improve the life of the nation and develop the Indonesian people. Developing students' thinking skills is a major educational goal in societies around the world (Larsson, 2017). Thinking skill involves making judicious purposeful judgments because of engaging in a process

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of analysis, interpretation evaluation, inference, explanation, and reflection (Facione, 2013). Academic research confirms that students develop critical and higher-order thinking skills through teacher-facilitated questions (Ennis, 1996). Ennis emphasizes that asking students questions is a way to build complex conceptualizations and foster critical thinking. lazy. According to Bloom's taxonomy (1956) question types are closed, open, display, referential, procedural, convergent, divergent, rhetorical, interaction, instructional and conversational. That taxonomy will guide the researcher to find out the types of questions that teachers use. Bloom's Taxonomy is widely accepted as a guideline for teachers in building up students' cognitive skills. Besides the question, the role of instruction is important in developing higher-order thinking skills. According to Lestari, Maridi & Ashadi (2018) instructional method is an important aspect of teaching and learning to determine the activities of teachers and students. Appropriate instructional methods influence many motivational variables of learners such as a tendency to think critically. To sum up, questions and instruction are part of developing students' higher-order thinking skills.

To ensure the authenticity of the ideas in this study, the researcher presents several relevant inspirations from some foregoing researchers. The first is by Syaryfah Nur Fadhillah (2019) entitled "An Analysis of Bloom"s Taxonomy Found in the Textbook Exercise on "BahasaInggris" Textbook for Twelfth Grade Published by *Pusat Kurikulum dan Perbukuan*". The findings of this study showed that the English textbook entitled Bahasa Inggris for twelfth grade published by *Pusat Kurikulum dan Perbukuan* has found the cognitive level of Revised Bloom Taxonomy that is applied most dominantly, less dominantly, and least dominantly

in the English book. This previous study is different from the recent research in the relation to the textbook grade being analyzed. The first textbook focuses on the twelfth grade in senior high school while the researcher focuses on the first grade of Junior High School.

The second is by Febriana (2019) entitled "Analysis of Reading Comprehension Question by Using Revised Bloom's Taxonomy on Higher-Order Thinking Skill (HOTS)". The result showed that the most dominant level in the textbook was higher-order thinking skills (HOTS). It was 66.8% off 100% while it was 33.4% for lower-order thinking skills (LOTS). The difference between this second previous study and the recent research is that this previous one concerns HOTS within reading questions.

Therefore, considering the above discussion, evaluating the digital learning application is needed. This present study was intended to do a content analysis on the representation of higher-order thinking skills on the *My English Step Website* learning materials for seventh graders. The difference from previous research in this study focuses on instruction and questions in which HOTS manifested in the *My English Step* website. The analysis was based on the cognitive and knowledge level of Bloom's revised taxonomy proposed by Anderson and Krathwohl (2001), focusing only on HOTS which is analyzing, evaluating, and creating. Research on HOTS analysis in a learning platform is new, making this worth doing.

1.2 Research Question

Based on the background study above, the research will be conducted to discover the answer to the following questions:

1. How are the representation of thinking skills in instruction for seventh graders at the *My English Step* website?

2. How are the representation of thinking skills in question for seventh graders at the *My English Step* website?

1.3 Purposes of the Study

Based on the research question, the purpose of this study is as follows:

1. To analyze the representation of thinking skills in instruction for seventh graders at *My English Step*.

2. To analyze the representation of thinking skills in question for seventh graders at *My English Step*.

1.4 Scope of the Study

This research focuses on the material on the *My English Step* website for seventh-grader students. They are limited only to instruction and questions because instruction and questions could give a broader insight into students' thinking so they could train higher-order thinking skills properly. The question that will be analyzed is only the question preceded by WH-question words (What, Who, When, Where, Why, and How). The selected instruction and question will be

analyzed by using an analysis table of cognitive dimensions from Bloom's Revised Taxonomy.

1.5 Significance of the Study

This study is expected to provide theoretical and practical benefits.

(1) Theoretical Significance

This study would provide information to the readers about thinking skills on digital learning platforms such as *My English Step*, and other websites. Moreover, this study can give beneficial information to other researchers who are interested to conduct further research in this area

(2) Practical Significance

The researcher hopes this study will be able to help the readers how to represent the elements of thinking skills in a digital learning platform. Furthermore, the result of the study is expected to inform all the teachers and students that used digital learning in their learning process in terms of thinking skills. The finding of this study also will help the writer and the reader to get more knowledge about digital learning thinking skills.

(3) Pedagogical Significance

This research presents the theory and analysis of cognitive thinking skills of exercise of seventh-graders on the *My English Step* website. Hopefully, it can provide broader insight to the teacher about higher-order thinking skills from the revised edition of Bloom's Taxonomy and in designing an assignment properly.